



Latest Update on USPTO Inter Partes Review Proceedings

RACHEL CLARK HUGHEY

In September 2011, the Leahy-Smith America Invents Act (AIA) was signed into law.¹ In addition to changing priority laws from first-to-invent to first-inventor-to-file,² the AIA also introduced new post-grant proceedings, administrative adjudications of patentability designed to be more trial-like than examinational.³ Included in the new post-grant proceedings are inter partes review (IPR), covered business method review (CBM), and post-grant review (PGR).

AIA proceedings differ from district court proceedings both in terms of procedure and standards of proof. For example, AIA defined the petitioner's burden of evidentiary proof as "by a preponderance of the evidence."⁴ This differs from the "clear and convincing evidence" burden of proof that exists in the district courts.⁵ For these and other reasons, there is the perception that patents are easier to invalidate in these proceedings than in the district courts (likely true), and accused infringers have flocked to the United States Patent and Trademark Office (USPTO) to challenge patents, primarily in IPR proceedings. Because these proceedings remain relatively new, though, relevant case law informing the procedural and substantive boundaries evolves. In the past year, the Federal Circuit's decisions—including its highly fractured en banc decision in *Aqua Products*—continued to enlighten these proceedings. There is also a Supreme Court case pending that has the potential to wipe these proceedings out entirely. The discussion below covers what we have learned in the past year.

Statistics

PTAB Statistics

As of July 31, 2017, 6,712 IPR, 524 CBM, and 70 PGR petitions had been filed with the Patent Trial and Appeal Board (PTAB).⁶ More than half of those petitions were filed in the electrical/computer area (60 percent), with 21 percent the mechanical/business method space.⁷ The remainders were filed in bio/pharma (11 percent), chemical (7 percent), and design (1 percent).⁸ Around 73 percent of the petitions filed in the business methods space are instituted, with almost the same amount in chemical (72 percent) and electrical/computer (71 percent). Only 62 percent of petitions filed in biology/pharma are instituted, and less than half of design petitions (43 percent) are instituted.⁹ The patent owners in the chemical space are the most likely to file a preliminary response (61 percent), followed by bio/pharma (49 percent), mechanical/business method (38 percent), electrical/computer (37 percent), and design (32 percent).¹⁰

Institution rates have been falling over time. The institution rate was 87 percent in 2013, falling to 75 percent in 2014, 68 percent in 2015, 67 percent in 2016, and 63 percent in 2017.¹¹ Mechanical and business method matters are the most likely to be instituted (70 percent), followed by electrical/computer (69 percent), chemical (67 percent), bio/pharma (63 percent), and design (40 percent).¹²

Pre-institution settlement has increased over time. In 2013, only 9 percent of matters settled prior to institution.¹³ In 2014, the rate increased to 12 percent of matters settling prior to institution.¹⁴ By 2015, 16 percent settled, 14 percent settled in 2016, and 14 percent settled through July 2017.¹⁵ For the instituted matters that were resolved in 2013, 90 percent (18) settled.¹⁶ In 2014, 40 percent (110) of the instituted matters that were resolved settled.¹⁷ The number was 29 percent (212) in 2015, 22 percent (194) in 2016, and 23 percent through July 2017.¹⁸

Of the 7,306 petitions filed through July 2017, 3,710 have been instituted, and there have been 1,674 final written decisions.¹⁹ In those matters, 65 percent found all claims unpatentable, 17 percent found some claims unpatentable, and 18 percent found no claims unpatentable (i.e., the claims remain valid).²⁰

Federal Circuit Statistics

In 2016, the number of appellate filings in the United States Court of Appeals for the Federal Circuit from the PTAB was projected to surpass filings from district courts.²¹ That was, in fact, the case, as in FY2016 (Oct. 1, 2015 to Sept. 30, 2016) 29 percent of the court's caseload was from district courts and 33 percent of its caseload was from the USPTO.²²

PTAB appeals in 2017 have continued to surpass district court appeals in the Federal Circuit.²³ From the beginning of 2017 through June 31, 2017, there were 502 appeals filed in the Federal Circuit from district courts.²⁴ During that same time, there were 616 appeals from the PTAB.²⁵ Because of the increased filings, it is unsurprising that, in 2017, the number of decisions in appeals arising from the USPTO has exceeded the number of decisions from the district courts.²⁶

In the majority of the PTAB appeals to the Federal Circuit—greater than 75 percent—the Federal Circuit affirms the PTAB's decision.²⁷ In a small portion of cases (less than 5 percent), the Federal Circuit reverses the PTAB's decision without remand.²⁸ Roughly 20 percent of the cases are remanded from the Federal Circuit back to the PTAB.²⁹ In those, around half result in the same outcome as the original case.³⁰ Of the appeals from the PTAB, around half are concluded via a written decision, with the other half being affirmances without opinion under Rule 36.³¹

Recent Decisions

Procedural Decisions

The Federal Circuit's and Supreme Court's early decisions clarified many of the procedural issues surrounding post-grant proceedings. In *Cuozzo*, the Supreme Court held that a PTAB institution decision is not appealable after a final written decision and that the USPTO had the authority to adopt the broadest reasonable interpretation claim construction standard.³² The Federal Circuit held in *Nike* that the patent owner need only show patentability of the new claims over the "material prior art that [the] patent owner makes of record in the current proceeding pursuant to its duty of candor and good faith to the [USPTO]" and not "over prior art not of record but known to [the] patent owner" as set forth in

Idle Free.³³ *Veritas* likewise challenged the PTAB's strict stance on denying motions to amend, finding the one there arbitrary and capricious.³⁴ In *Microsoft*, the court confirmed that the standard of review from an agency decision is de novo for conclusions of law and substantial evidence for findings of fact.³⁵

The Federal Circuit has Jurisdiction to Review Ptab Determinations that IPR Petitions Are Timely

On Jan. 8, 2018, the Federal Circuit issued an en banc decision in *Wi-Fi One, LLC v. Broadcom Corp.*, concluding that PTAB decisions that IPR petitions are timely filed are appealable, overruling previous decisions to the contrary. In that case, the court considered the following question:

Should this court overrule *Achates Reference Publishing, Inc. v. Apple Inc.*, 803 F.3d 652 (Fed. Cir. 2015), and hold that judicial review is available for a patent owner to challenge the USPTO's determination that the petitioner satisfied the timeliness requirement of 35 U.S.C. § 315(b) governing the filing of petitions for inter partes review?

Before the PTAB, Wi-Fi One argued that Broadcom's IPR petition was time-barred because, while Broadcom was not sued on the patent and thus not clearly subject to the one-year after-suit bar under 35 U.S.C. § 315(b) for an IPR filing, Broadcom was in privity with companies that had been sued on the patent more than a year before its petition was filed. The PTAB rejected Wi-Fi One's request for discovery on the issue, found the petition was not time-barred, and found the challenged patent claims invalid. After a Federal Circuit panel affirmed the PTAB's decision, the court took up the issue en banc.

In a 9-4 decision, the court "recognize[d] the strong presumption in favor of judicial review of agency actions," noting "[t]o overcome this presumption, Congress must clearly and convincingly indicate its intent to prohibit judicial review. We find no clear and convincing indication of such congressional intent. We therefore hold that the time-bar determinations ... are appealable." The court's decision remanded the case to the merits panel and provided Wi-Fi One with an opportunity to argue on that Broadcom's challenge Wi-Fi One's patent was time barred.

The dissent asserted that the court lacked jurisdiction to review the PTAB's decision, asserting the majority's opinion "not only contradicts the statutory language, but is also contrary to the Supreme Court's construction of that language in" *Cuozzo*.

The Petitioner has the Burden of Showing Substitute Claims Are Unpatentable

The decisions out of the court in the last year continue to clarify many of the procedural issues before the PTAB and Federal Circuit in appeals arising from the PTAB.

On Aug. 12, 2016, the court granted Appellant Aqua Products' petition for rehearing en banc, and asked the parties (patent owner Aqua Products and intervenor USPTO; the successful petitioner declined to participate in the appeal) to brief the following questions:

1. When the patent owner moves to amend its claims under 35 U.S.C. § 316(d), may the USPTO require the patent owner to bear the burden of persuasion, or a burden of production, regarding patentability of the amended claims as a condi-

tion of allowing them? Which burdens are permitted under 35 U.S.C. § 316(e)?

2. When the petitioner does not challenge the patentability of a proposed amended claim, or the PTAB thinks the challenge is inadequate, may the PTAB sua sponte raise patentability challenges to such a claim? If so, where would the burden of persuasion, or a burden of production, lie?³⁶

The court heard oral argument on Dec. 9, 2016,³⁷ but a decision remained elusive. On Oct. 4, 2017, a divided court issued several opinions.³⁸ None garnered a full majority in all respects. The leading opinion, authored by Judge Kathleen M. O'Malley, concluded that there was no interpretation of 35 U.S.C. § 316(e) by the director of the USPTO that required *Chevron* deference and, "in the absence of any required deference, the most reasonable reading of [35 U.S.C. § 316] is one that places the burden of persuasion with respect to the patentability of amended claims on the petitioner." Thus, the court concluded, the PTAB erred when it imposed the burden of proving the patentability of proposed substitute claims on the patent owner. Judges Pauline Newman, Alan D. Lourie, Kimberly A. Moore, and Evan J. Wallach joined in Judge O'Malley's decision, and Judges Timothy B. Dyk and Jimmie V. Reyna concurred in the result. Judge Moore authored a separate opinion, joined by Judges Newman and O'Malley. Judge Reyna also authored a separate opinion, joined by Judge Dyk, and joined in part by Chief Judge Sharon Prost and Judges Richard G. Taranto, Raymond T. Chen, and Todd D. Hughes. Judge Taranto authored a dissent, joined by Chief Judge Prost and Judges Chen and Hughes, and joined by Judges Dyk and Reyna in part in other respects. Judge Hughes also authored a dissent, joined by Judge Chen.

Standing is required to appeal ... but maybe not to respond.

In *Phigenix*, the court provided guidance on standing required to appeal PTAB decisions, holding that petitioner Phigenix lacked standing to appeal an IPR decision upholding Immunogen's patent because it lacked standing.³⁹ Citing its *Consumer Watchdog* decision, the court explained that "although Article III standing is not necessarily a requirement to appear before an administrative agency, an appellant must nevertheless supply the requisite proof of an injury in fact when it seeks review of an agency's final action in a federal court."⁴⁰ The court recognized that to have standing, a party "must have (1) suffered an injury in fact, (2) that is fairly traceable to the challenged conduct of the [appellee], and (3) that is likely to be redressed by a favorable judicial decision and that "the injury in fact requirement requires [the petitioner] to allege an injury that is both concrete and particularized."

The court found that the petitioner lacked standing to appeal because it had not offered sufficient proof establishing that it had suffered an injury in fact, namely: the petitioner did not contend that it faced a risk of infringing the patent, that it was an actual or prospective licensee of the patent, or that it otherwise planned to take any action that would implicate the patent. The court rejected the petitioner's arguments that it had standing due to the injury it faced from its licensing efforts of its own patent portfolio, which it argued were hindered by the patent owner's patent licensing. The court acknowledged that the petitioner's licensing revenues might have increased if the patent was invalid, but there was no allegation that the petitioner licensed its patent portfolio to anyone, much less to those who licensed the challenged patent. Because the petitioner

lacked standing to appeal, the appeal was dismissed.

In *Personal Audio*, on the other hand, the court found that Electronic Frontier Foundation (EFF)—a nonprofit foundation allegedly representing the public interest—had standing to participate in an appeal of a PTAB decision that held that appellant Personal Audio's claims invalid because appellee EFF was not the party invoking judicial review.⁴¹ EFF was not threatened by the patent claims and, as the court appeared to acknowledge under its *Consumer Watchdog*⁴² case, would not have authority to file an appeal from an adverse PTAB decision because it would not meet the "case or controversy" standard required by Article III of the U.S. Constitution. But the court reasoned that because EFF won the agency proceeding (the patent claims it challenged were invalidated) and thus was not the party that was appealing, *Consumer Watchdog* did not control. The court explained that appellant Personal Audio had standing because its patent was invalidated, and that was the only standing required: "With Article III satisfied as to the appellant, EFF is not constitutionally excluded from appearing in court to defend the PTAB decision in its favor." The court then went on to side with EFF on the merits, confirming the claims as unpatentable. Some scholars have suggested the court's standing decision is inconsistent with Supreme Court case law that requires both parties to have standing.⁴³

The Federal Circuit's lack of jurisdiction to review PTAB institution decisions extends to the question of assignor estoppel.

In *Husky Injection Molding Systems*, the Federal Circuit held that it lacked jurisdiction to review the PTAB's determinations on whether assignor estoppel precludes institution of an IPR.⁴⁴ Husky's former owner and president, Robert Schad, was a co-inventor and initial assignee of the patent. Schad later sold Husky to a private equity group, and left to form Athena. In 2012, Athena filed an IPR petition, challenging the patentability of all 22 claims in the patent. Before the PTAB, Husky argued that petitioner Athena was in privity with co-inventor Schad, an original assignor of the patent, and thus was estopped from challenging the claims of the patent in the proceeding. The PTAB rejected that argument, reasoning that assignor estoppel is an equitable doctrine that is a defense to certain claims of patent infringement, and did not provide for an exception to the broad mandate allowing for the challenge of a patent in the agency via IPR. The PTAB noted that there was a statute that provided for equitable defenses in International Trade Commission proceedings, but not IPR proceedings. The PTAB went on to find some claims anticipated and other claims not anticipated. The parties cross-appealed. (Athena's cross-appeal is discussed below.)

With respect to Husky's assignor estoppel defense, the court found that it lacked jurisdiction to consider it. The court noted that § 314(d) provides that "the determination by the director whether to institute inter partes review under this section shall be final and nonappealable"⁴⁵ and the Supreme Court's agreement in *Cuozzo*⁴⁶ that such language foreclosed review there. While acknowledging that *Cuozzo* left open the possibility for review of appeals that "implicate constitutional questions, that depend on other less closely related statutes, or that present other questions of interpretation that reach, in terms of scope and impact, well beyond 'this section,'" the court reasoned that the issue of whether assignor estoppel applies at the USPTO did not relate to one of the three reviewable categories from *Cuozzo* and was not directed to the PTAB's ultimate

invalidation authority, so it found that § 314(d) barred review of the PTAB's institution decision. Judge S. Jay Plager dissented.

Notice is still required.

One area that continues to evolve is the question of notice and fairness in PTAB proceedings. The court has required the PTAB to provide adequate notice and faulted the PTAB when it appeared to adopt claim constructions without notice.⁴⁷ The court continues to fault the PTAB for failing to provide adequate notice.

In the *NuVasive* case, the Federal Circuit vacated and remanded an IPR proceeding after finding that the PTAB violated the Administrative Procedure Act (APA) by failing to allow the patent owner to fully respond to the material the petitioner relied on for the first time in its reply.⁴⁸ There, petitioner NuVasive filed two petitions for IPR. The first petition cited one of the figures of the prior art Michelson reference as a relevant portion. The second petition did not cite that figure; petitioner Medtronic cited it in its reply to NuVasive's response. In response, NuVasive requested leave to file motions to strike or, alternatively, surreplies, which the PTAB denied, and NuVasive was not permitted to address the issue at oral hearing. The PTAB ultimately canceled all but one of the challenged claims, and its final decision "relied heavily" on that portion of the reference. Medtronic later settled with NuVasive and withdrew from the appeals, where the PTAB's decision was defended by the USPTO's Office of the Solicitor.

On appeal, NuVasive argued that it did not receive adequate notice of or opportunity to address that reading of Michelson and its consequences for the overall obviousness analysis. The Federal Circuit agreed in part, vacating and remanding. The court explained that the APA protects "against loss of patent rights without the required notice and opportunity to respond...Although the [PTAB] is not limited to citing only portions of the prior art specifically drawn to its attention," here "the [PTAB] treated [the portion cited in reply] as an essential part of its obviousness findings identifying claim elements in the prior art." The portion did not merely "describe the state of the art" or "inform[] the understanding of another, separate prior art disclosure." Thus, the court held that the PTAB's "refusal to allow [the patentee] to respond fully once that material was called out, violated [the patentee's] rights under the APA" such that a remand for further proceedings was necessary.

In *EmeraChem v. Volkswagen*, the Federal Circuit again held that the PTAB violated the APA when it failed to provide adequate notice.⁴⁹ There, the PTAB's final written decision relied on a reference, Stiles, to find claims 3, 16, and 20 invalid, although that reference had not been a focus before the PTAB.

On appeal, EmeraChem argued the PTAB violated the APA's requirements of notice and an opportunity to respond because EmeraChem did not receive adequate notice of or an opportunity to respond to the PTAB's reliance on Stiles for determining certain claims would have been obvious. As the court explained, "In a formal adjudication, like an IPR, the APA imposes particular procedural requirements on the USPTO. The agency must timely inform the patent owner of 'the matters of fact and law asserted,' give all interested parties the opportunity to submit and consider facts and arguments, and allow a party 'to submit rebuttal evidence . . . as may be required for a full and true disclosure of the facts.'"⁵⁰

The court rejected appellee Volkswagen and intervenor USPTO's arguments that EmeraChem had sufficient notice because both the

petition for IPR and institution decision included broad, general statements concerning obviousness that mention Stiles, pointing out that the petition had a detailed claim chart that identified, claim-by-claim and element-by-element, the specific portions of the prior art references it believed supported obviousness, as did the institution decision. And neither one of those detailed claim charts included the reference relied upon by the PTAB in the final decision. The court held,

Given the specificity with which the petition's claim chart and the Institution Decision's list of claims expressly identified particular references' disclosures for some claims and not for others, it cannot be the case that the general statements Volkswagen relies upon provided sufficient notice that Stiles could be applied to all claims. Where the petitioner uses certain prior art references to target specific claims with precision, or the PTAB does the same in its decision to institute, the patent owner is directed to particular bases for alleged obviousness. A general statement that lists all challenged claims and all asserted prior art is not a separate, additional articulation that each of the claims may be obvious over any combination of all listed prior art.

The court distinguished its prior decision in *Genzyme*,⁵¹ asserting, "Unlike *Genzyme*, EmeraChem did not have the same notice and opportunity to respond to the PTAB's ultimate usage of Stiles against claims 3, 16, and 20, and the prior art was used to establish a claim limitation." The court clarified, though, that:

By holding EmeraChem did not receive adequate notice or opportunity to respond with regard to Stiles, we do not hold that the PTAB is constricted in its final written decision to citing only the portions of a reference cited in its Institution Decision. We do not require "word-for-word parity between the institution and final written decisions." But in the case before us, the question is not whether the PTAB cited a different passage of Stiles than what it specifically cited in the Institution Decision. The question is whether the PTAB provided adequate notice and opportunity to respond to Stiles being used to reject claims 3, 16, and 20, given the specificity with which the PTAB itemized the challenged claims with specific grounds for rejection in the Institution Decision. On this question, we find it did not.⁵²

Because the dispute between the parties was whether the notice was proper—and not the proper remedy (reversal)—the court found "we consider them to have waived any argument that any remedy other than reversal is appropriate when a new rationale for unpatentability is adopted by the PTAB in its final written decision." The court, however, vacated and remanded the case, writing: "Because we are unable to discern whether the PTAB found Saito does not disclose the dependent limitations in claims 3, 16, and 20, we vacate the PTAB's decision as to these claims and remand for clarification."

The PTAB can invalidate claims previously found not invalid by a district court.

In *Novartis*, the Federal Circuit affirmed the PTAB's obviousness determination on claims that were previously found nonobvious by a district court.⁵³ Petitioner Noven filed IPR petitions on a number of

patent claims previously found nonobvious by a district court. After the PTAB found the claims obvious, Novartis appealed, arguing the different outcome was improper. Affirming the obviousness finding, the Federal Circuit recognized there was a different record before the PTAB and the district court, explaining “it is unsurprising that different records may lead to different findings and conclusions.” The Court also noted the different burdens of proof—“preponderance of the evidence” at the PTAB and “clear and convincing” at the district court—allowed for different conclusions. Although recognizing that it had previously stated the USPTO “ideally should not arrive at a different conclusion” if it faces the same evidence and argument as a district court, it found that was not an absolute rule.

The PTAB’s evidentiary decisions are reviewed for abuse of discretion, but they can still be challenged successfully.

In *REG Synthetic Fuels*, the Federal Circuit provided guidance on evidentiary issues before the PTAB.⁵⁴ At the oral argument in that IPR proceeding, the PTAB excluded several patent owner exhibits based on lack of authentication, hearsay, and improper reply evidence. The patent owner appealed those evidentiary rulings and the ultimate anticipation finding. The Federal Circuit affirmed the PTAB’s anticipation finding as to some claims, but reversed others on the grounds that the PTAB had improperly excluded as hearsay a patent owner exhibit of an email communication involving the patent owner that showed the inventor proved conception of the invention prior to the filing date of the prior art. The court rejected the PTAB’s hearsay determination, finding that “the act of writing and sending the email is, by itself, probative evidence.” The court concluded the exhibit was “legally significant” because it “communicated the conception” of the invention to a third party prior to the filing date of the cited prior art. The court remanded for a determination of diligence and reduction to practice.

In *Ultratec*, the Federal Circuit found the PTAB abused its discretion when it failed to permit the respondent to submit supplemental evidence.⁵⁵ In eight parallel IPR proceedings, CaptionCall challenged claims of several patents asserted by Ultratec in litigation. In the agency proceedings, Ultratec sought to supplement the record to introduce CaptionCall’s invalidity expert’s trial testimony to demonstrate that it was inconsistent with his written declarations in the IPRs. The PTAB did not permit the testimony to be admitted, and while it indicated a written order would be entered providing its basis, no such order was entered. The PTAB then found all of the challenged claims anticipated or obvious, citing CaptionCall’s expert’s testimony over thirty times in its decision, and finding him more credible than Ultratec’s expert. Ultratec appealed, and the USPTO intervened to defend the PTAB’s decisions.

In 37 C.F.R. § 42.123(b), it states that “the request to submit new information must show: (1) why the supplemental information reasonably could not have been obtained earlier, and (2) that consideration of the supplemental information would be in the interests of justice.” On appeal, the court found that the record supported only one conclusion: Ultratec satisfied both of § 42.123(b)’s requirements for allowing Ultratec to file a motion to admit the expert’s trial testimony. The court explained that the evidence could not have been obtained earlier since Ultratec emailed the PTAB requesting authorization to file a motion to supplement the record the week after the jury trial concluded. The court reasoned that the fact that Ultratec could have, but did not, depose and obtain inconsistent testimony from the

expert during the IPR itself is not a basis for concluding otherwise. Reviewing the PTAB’s decision of how it manages its permissive rules of trial proceedings for abuse of discretion, the court found such an abuse. Citing the Supreme Court’s 1943 decision in *Chenery*, the court explained that “the agency does not have unfettered discretion in these matters, and we cannot affirm agency decision-making where the agency fails to provide a reasoned basis for its decision.”⁵⁶ The Federal Circuit vacated and remanded because “the PTAB failed to consider material evidence and failed to explain its decisions to exclude the evidence.”

Statements in an IPR can lead to prosecution disclaimer.

In *Aylus Networks*, the Federal Circuit held that statements made by a patent owner during an IPR proceeding, whether before or after an institution decision, can be relied upon to support a finding of prosecution disclaimer.⁵⁷ In its preliminary response in the IPR proceeding, Aylus argued that claim 2 requires that “only” the control point proxy logic is invoked under the conditions described in claim 2, and the PTAB did not institute the IPR on claim 2. In the later district court case, the court construed claim 2 to require that “only” the control point proxy logic is invoked. That claim construction determination led to a summary judgment determination of noninfringement.

On appeal, the Federal Circuit “determine[d] an issue of first impression for this court: whether statements made by a patent owner during an IPR proceeding can be relied on to support a finding of prosecution disclaimer during claim construction.” The court held that such statements, before or after an institution decision, can be considered for claim construction, and affirmed the finding of prosecution disclaimer. The court explained that “the doctrine of prosecution disclaimer ensures that claims are not ‘construed one way in order to obtain their allowance and in a different way against accused infringers.’” The court held that Aylus’s statements were a “clear and unmistakable” disavowal of claim scope and, based on this disclaimer, affirmed the district court’s claim construction and summary judgment determination.

Once claims are invalidated, challenges on other grounds are moot.

In *Unwired Planet*, the Federal Circuit affirmed the PTAB’s determination, after an IPR proceeding, that certain challenged claims were invalid.⁵⁸ Because of that decision, the court dismissed as moot a separate appeal from the PTAB’s determination, after a CBM proceeding, that the same claims were invalid.

Substantive Decisions

While the Federal Circuit affirms a large percent of PTAB appeals, the Federal Circuit’s early substantive decisions demonstrated that it would not just rubber-stamp the PTAB’s determinations. One area where PTAB decisions were vulnerable was claim construction. After finding an erroneous claim construction, the Federal Circuit generally remands to the PTAB for findings under the proper construction,⁵⁹ but in *Cutsforth*, the Federal Circuit reversed the PTAB because it found no reasonable fact finder could have found that a prior art reference anticipated the given claim element under the proper construction.⁶⁰ Another area of vulnerability of the PTAB’s decisions was in its reasoning. The Federal Circuit repeatedly required evidence to support the PTAB’s decisions and reversed the PTAB’s decisions

if they were unsupported by the evidence.⁶¹ Likewise, the Federal Circuit required the PTAB's decisions to be clear, or it would vacate and remand.⁶² In some situations, the court even reversed such decisions.⁶³ Claim construction and clarity remained areas of vulnerability in the past year.

Claim construction remains an area of vulnerability.

The Federal Circuit continued to require the PTAB to properly construe claims and vacated invalidity decisions that were based on improper claim constructions. For example, in *IPcom*, the Federal Circuit vacated and remanded the PTAB's obviousness determination because the PTAB failed to construe the means-plus-function limitation.⁶⁴ When construing the means-plus-function claim, the PTAB rejected the patentee's proposed construction of the element but failed to make a determination on the proper construction. On appeal, the Federal Circuit found that the PTAB was required to identify the particular claimed function and the corresponding structure, material, or acts that perform that function, and that was required regardless of the fact that the PTAB was using the broadest reasonable interpretation claim construction standard. The Federal Circuit thus vacated and remanded the PTAB's obviousness determination there. Likewise, in *D'Agostino*, the PTAB found method claims of two patents invalid as anticipated and obvious.⁶⁵ On appeal, the Federal Circuit concluded the PTAB's claim construction was unreasonable and vacated and remanded.

In *Homeland Housewares*, the Federal Circuit reversed the PTAB's determination that the claims were not invalid as anticipated after finding it failed to construe a key term.⁶⁶ After construing the term, the court concluded the PTAB erred in finding that the prior art does not anticipate the asserted patent claims. The court also found that portions of the expert testimony—which the PTAB found were un rebutted on the issue of anticipation—were inconsistent with the intrinsic record and should be discounted.

PTAB decisions continue to require support.

The decisions in the last year continue to demonstrate that the PTAB's invalidity determinations require sufficient support. In *PersonalWeb*, petitioner Apple argued certain claims were obvious based on a combination of two prior art references.⁶⁷ On appeal, the Federal Circuit found that the PTAB's obviousness decision was "inadequate" because it did not sufficiently explain and support its obviousness conclusion. Specifically, the court concluded that the PTAB's decision failed to provide support for its conclusion that (1) the two prior art references disclosed all of the elements recited in the challenged claims⁶⁸ and (2) a relevant skilled artisan would have been motivated to combine them in the way recited in the claims and reasonably expect success.⁶⁹ The court explained:

The amount of explanation needed to meet the governing legal standards—to enable judicial review and to avoid judicial displacement of agency authority—necessarily depends on context. A brief explanation may do all that is needed if, for example, the technology is simple and familiar and the prior art is clear in its language and easily understood. See *Ariosa*, 805 F.3d at 1365-66. On the other hand, complexity or obscurity of the technology or prior-art descriptions may well make more detailed explanations necessary. Here, the PTAB's explanation is wanting.

Quoting the Supreme Court's *Chenery* decision, the court explained that "courts cannot exercise their duty of review unless they are advised of the considerations underlying the [agency] action under review. . . . The orderly functioning of the process of review requires that the grounds upon which the administrative agency acted be clearly disclosed and adequately sustained."⁷⁰ The court remanded for the PTAB to "reconsider the merits of the obviousness challenge, within proper procedural constraints."

In *Shinn Fu*, the Federal Circuit found the PTAB's decision arbitrary and capricious because it failed to address the petitioner's obviousness combination.⁷¹ The PTAB granted the patent owner's motion to amend and then held the substitute claims patentable. Pursuant to 5 U.S.C. § 706(2)(A) and (E), the Federal Circuit reviews the PTAB's IPR decisions to ensure that they are not "arbitrary, capricious, an abuse of discretion, . . . otherwise not in accordance with law . . . [or] unsupported by substantial evidence." Applying that standard, the Federal Circuit found that the PTAB did not properly consider the arguments the petitioner set forth in its opposition to the patent owner's motion to amend. Specifically, the court found the PTAB's decision was arbitrary and capricious because it did not reference the petitioner's proposed obviousness combination in its final written decision and did not provide a substantive analysis of the merits of its arguments. The court found that "because the PTAB did not provide any analysis with regard to the manner in which Shinn Fu proposed its key obviousness combination, we have no meaningful way to review the PTAB's patentability determination in light of Shinn Fu's arguments." While suggesting that the "the law does not require that the PTAB address every conceivable combination of prior art discussed throughout an IPR proceeding, no matter how duplicative the other references are" it explained that "the PTAB does have an obligation, however, to address the arguments that the parties present to it. . . . It simply did not meet its obligation here." Thus the court vacated the PTAB's decision and remanded it for the PTAB to address the obviousness arguments in the first instance.

In *Husky Injection Molding Systems*, discussed above, the court also addressed Athena's cross-appeal, which challenged the PTAB's determination that the prior art did not incorporate another prior art document by reference.⁷² There, the court vacated the PTAB's finding of no anticipation and remanded. Anticipation is a fact question the court reviews for substantial evidence. The court found that substantial evidence did not support the PTAB's finding that there was no incorporation by reference. The court reasoned that while the prior art did not disclose all of the claim elements, it incorporated by reference another patent that included the missing claim elements.

In *Nidec Motor Corp.*, the Federal Circuit concluded that substantial evidence did not support the PTAB's finding that a prior patent anticipated a claim because the prior patent did not disclose a limitation, and the PTAB was not permitted to fill in missing limitations simply because a skilled artisan would immediately envision them.⁷³

In an unusually glowing decision, the Federal Circuit praised the PTAB's findings in *Smartdoor Holdings*.⁷⁴ There, the court found "the PTAB did a commendable job in rendering its detailed and thorough opinion. The PTAB provided detailed findings on the scope and content of Shea and Burke and the reasons one of ordinary skill in the art would have been motivated to combine these references, and carefully and clearly responded to Smartdoor's contrary arguments, greatly aiding our review on appeal." The court went on to affirm the PTAB's invalidity determinations.

Coming up at the Federal Circuit

There are a number of cases pending before the Federal Circuit on post grant issues. One such case is *Knowles v. Matal*, where the Federal Circuit ordered supplemental briefing from both appellant Knowles and appellee-intervenor USPTO on the following issues:

1. When the prevailing party in an inter partes reexamination proceeding before the PTAB declines to appear before this court to defend the decision below, is the USPTO's director required to possess Article III standing in order to intervene?
2. If yes, does the director possess such standing in this appeal?
3. Additionally, if the director does in fact possess standing; must the director defend the PTAB's decision? Alternatively, what are the ramifications if the director declines to defend the PTAB's decision?⁷⁵

The Federal Circuit's decision on the issue could have a significant impact on cases where a successful party before the USPTO decides not to participate in an appeal (which is what happened here). Generally, the USPTO solicitor's office will intervene in such a case and defend the USPTO's decision. The outcome of this case could change that.

Coming Up at the Supreme Court...

By far the most interesting PTAB-related case pending before the Supreme Court as of this writing is *Oil States Energy Services, LLC v. Greene's Energy Group, LLC*. The Court granted Oil States' petition for writ of certiorari in June, and considered the following question:

Whether inter partes review, an adversarial process used by the USPTO to analyze the validity of existing patents, violates the Constitution by extinguishing private property rights through a non-Article III forum without a jury.

Oil States submitted its merits brief in August, arguing that inter partes review violates Article III.⁷⁶ A large number of amicus briefs have been filed.⁷⁶

Perhaps more interesting than the question of what the outcome of the decision will be is what would happen if the Supreme Court found IPR proceedings unconstitutional. If the Court finds that IPR is unconstitutional, how will the courts and the USPTO deal with the thousands of patent claims that have already been found unpatentable and canceled by the PTAB? Presumably *Oil States* would overrule those administrative decisions that are still pending, but what about the decisions that have reached finality? Would *Oil States* effectively annul the fact that the patent owner no longer has any property rights in the invalidated claims? Would a patent owner be required (or permitted) to seek to revive the patents before the USPTO?

There is another PTAB-related case pending before the Supreme Court. In May, the Supreme Court granted SAS's petition for a writ of certiorari, and considered the following issue in the 2017 term⁷⁸:

Whether 35 U.S.C. § 318(a), which provides that the Patent Trial and Appeal Board in an inter partes review "shall issue a final written decision with respect to the patentability of any patent claim challenged by the petitioner," requires that board to issue a final written decision as to every claim challenged by the petitioner, or whether it allows that board to issue a final written decision with respect to the patentability of only some

of the patent claims challenged by the petitioner, as the U.S. Court of Appeals for the Federal Circuit held.

SAS filed its petition in July, arguing § 318(a) requires a final written decision with respect to the patentability of any patent claim challenged by the petitioner.⁷⁹ Only one party filed an amicus brief in support of SAS's petition—Intellectual Property Owners Association—agreeing with SAS that § 318(a) requires the PTAB to issue a final written decision as to every challenged claim.⁸⁰ In September, respondent filed its brief.⁸¹

Conclusion

Post-grant patent challenges remain a successful tool for petitioners to invalidate patent claims due to the high rate of trial institution and, ultimately, claim cancellation, although patent owners have been more successful recently than they were when the proceedings began. The decisions in the last year continue to provide additional guidance on these proceedings. ☺



Rachel C. Hughey is a shareholder at the law firm of Merchant & Gould, P.C., in Minneapolis. She is co-chair of the firm's appellate practice and chair of the firm's strategic planning committee. Hughey speaks and writes extensively on intellectual property topics, including post-grant proceedings. She can be reached at RHughey@Merchant-Gould.com. © 2018 Rachel C. Hughey. All rights reserved.

Endnotes

¹Pub. L. No. 112-29, 125 Stat. 284 (2011).

²See 35 U.S.C. § 102 (a) (2012).

³Leahy-Smith America Invents Act § 6, Pub. L. No. 112-29, 125 Stat. 284, 299-313 (2011); see also H.R. Rep. No. 112-98, pt. 1, at 46-47 (2011).

⁴35 U.S.C. §§ 316(d), 326(e) (2012).

⁵*Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 131 S. Ct. 2238, 2242 (2011).

⁶U.S. PAT. & TRADEMARK OFF., *Trial Statistics IPR, PGR, CBM* (July 2017), https://www.uspto.gov/sites/default/files/documents/trial_statistics_july2017.pdf.

⁷*Id.*

⁸*Id.*

⁹*Id.*

¹⁰*Id.*

¹¹*Id.*

¹²*Id.*

¹³*Id.*

¹⁴*Id.*

¹⁵*Id.*

¹⁶*Id.*

¹⁷*Id.*

¹⁸*Id.*

¹⁹*Id.*

²⁰*Id.*

²²Jason Rantanen, *Data on Federal Circuit Decisions*, PATENTLY-O (June 6, 2016), available at <https://patentlyo.com/patent/2016/06/circuit-appeals-decisions.html>.

²³U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT, APPEALS FILED: BY CATEGORY (FY 2016), <http://www.cafc.uscourts.gov/sites/default/files/>

the-court/statistics/FY16_Caseload_by_Category.pdf.

²²U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT, YEAR-TO-DATE ACTIVITY (June 30, 2017), http://www.cafc.uscourts.gov/sites/default/files/the-court/statistics/YTD_Activity_6.30.17.pdf.

²⁴*Id.*

²⁵*Id.*

²⁶Jason Rantanen, *Data on Federal Circuit Decisions – updated*, PATENTLY-O (Aug. 16, 2017), available at <https://patentlyo.com/patent/2017/08/federal-circuit-decisions-updated.html>.

²⁷Miyoung Shin, *Questioning PTAB Due Process In Fed. Circ. Appeals*, LAW360 (Sept. 1, 2017, 11:59 PM) <https://www.law360.com/articles/958710/questioning-ptab-due-process-in-fed-circ-appeals>; see also Kerry S. Taylor & Clayton R. Henson, *IPR Appeals: Outcomes In Fed. Circ. Remands To PTAB*, LAW360 (Feb. 7, 2017, 12:04 PM), <https://www.law360.com/articles/884927/ipr-appeals-outcomes-in-fed-circ-remands-to-ptab>.

²⁸*Id.*

²⁹*Id.*

³⁰Taylor & Hanson, *supra* note 28.

³¹Elliot C. Cook, Daniel F. Klodowski, & David C. Seastrunk, Federal Circuit PTAB Appeal Statistics—May 1, 2017, FINNEGAN: AIA BLOG (May 15, 2017), <http://www.aiblog.com/ptab-stats/federal-circuit-ptab-appeal-statistics-may-1-2017/>.

³²*Cuozzo Speed Tech., LLC v. Lee*, No. 15-446, 136 S. Ct. 2131 (U.S. June 20, 2016).

³³*Nike, Inc. v. Adidas AG*, 812 F.3d 1326, 1350-51 (Fed. Cir. 2016) (quoting *MasterImage 3D, Inc. v. RealD Inc.*, No. IPR2015-00040, 2015 Pat. App. LEXIS 5402, at *3, 2015 WL 4383224 (P.T.A.B. July 15, 2015)).

³⁴*Veritas Techs. LLC v. Veeam Software Corp.*, 835 F.3d 1406 (Fed. Cir. 2016).

³⁵*Microsoft Corp. v. Proxycomm, Inc.*, 789 F.3d 1292, 1297 (Fed. Cir. 2015).

³⁶*In re Aqua Prods.*, 823 F.3d 1369 (Fed. Cir. 2016).

³⁷Audio tape: U.S. Court of Appeals for the Federal Circuit, Aqua Products oral arguments, (Dec. 9, 2016), available at http://oralarguments.cafc.uscourts.gov/default.aspx?fl=2015-1177_1292016.mp3.

³⁸*Aqua Prods. v. Matal*, 872 F.3d 1290 (Fed. Cir. 2017) (en banc).

³⁹*Phigenix, Inc. v. Immunogen, Inc.*, 845 F.3d 1168 (Fed. Cir. 2017).

⁴⁰*Id.* (citing *Consumer Watchdog v. Wisconsin Alumni Res. Found.*, 753 F.3d 1258, 1261 (Fed. Cir. 2014) (citation omitted)).

⁴¹*Pers. Audio, LLC v. Elec. Frontier Found.*, No. 16-1123, 2017 U.S. App. LEXIS 14485 (Fed. Cir. Aug. 7, 2017).

⁴²*Consumer Watchdog v. Wisconsin Alumni Res. Found.*, 753 F.3d 1258 (Fed. Cir. 2014).

⁴³Dennis Crouch, *Federal Circuit Fails its Civil Procedure Test on Standing*, PATENTLYO (Aug. 9, 2017), <https://patentlyo.com/patent/2017/08/federal-procedure-standing.html>.

⁴⁴*Husky Injection Molding Sys. v. Athena Automation Ltd.*, 838 F.3d 1236 (Fed. Cir. 2016).

⁴⁵35 U.S.C. § 314(d) (emphasis added).

⁴⁶*Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131 (2016).

⁴⁷*SAS Inst., Inc. v. ComplementSoft, LLC*, 825 F.3d 1341 (Fed. Cir. 2016) (“What concerns us is not that the board adopted a construction in its final written decision, as the board is free to do, but that the board ‘change[d] theories in midstream.’”); *Dell Inc. v. Acceleron, LLC*, 818 F.3d 1293, 1301 (Fed. Cir. 2016) (“In this case,

the board denied Acceleron its procedural rights by relying in its decision on a factual assertion introduced into the proceeding only at oral argument, after Acceleron could meaningfully respond.”).

⁴⁸*In re: Nuvasive, Inc.*, 841 F.3d 966 (Fed. Cir. 2016).

⁴⁹*EmeraChem Holdings v. Volkswagen Group of Amer. Inc.*, 859 F.3d 1341 (Fed. Cir. 2017).

⁵⁰*Id.* (citations omitted).

⁵¹*Genzyme Therapeutic Prod. L.P. v. Biomarin Pharm. Inc.*, 825 F.3d 1360, 1366 (Fed. Cir. 2016).

⁵²*EmeraChem*, 859 F.3d 1341 (citations omitted).

⁵³*Novartis AG v. Noven Pharm. Inc.*, 853 F.3d 1289 (Fed. Cir. 2017).

⁵⁴*REG Synthetic Fuels, LLC v. Neste Oil Oyj*, 841 F.3d 954 (Fed. Cir. 2016).

⁵⁵*Ultratec, Inc. v. CaptionCall, LLC*, Nos. 16-1706, 16-1707, 16-1710, 16-1712, 16-1708, 16-1709, 16-1715, 16-1713, 16-2366, 2017 U.S. App. LEXIS 16363 (Fed. Cir. Aug. 28, 2017).

⁵⁶*Id.* (citing *SEC v. Chenery Corp.*, 318 U.S. 80, 94 (1943)).

⁵⁷*Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353 (Fed. Cir. 2017).

⁵⁸*Unwired Planet, LLC v. Google Inc.*, 41 F.3d 995 (Fed. Cir. 2016).

⁵⁹See *PPC Broadband, Inc. v. Corning Optical Communs. RF, LLC*, 815 F.3d 747, 752 (Fed. Cir. Feb. 22, 2016) (“The board seems to have arrived at its construction by referencing the dictionaries cited by the parties and simply selecting the broadest definition therein. . . . While such an approach may result in the broadest definition, it does not necessarily result in the broadest reasonable definition in light of the specification.”); see also *PPC Broadband, Inc. v. Corning Optical Communs. RF, LLC*, 815 F.3d 734 (Fed. Cir. 2016); *Straight Path IP Group, Inc. v. Sipnet EU S.R.O.*, 806 F.3d 1356 (Fed. Cir. 2015); *Microsoft*, 789 F.3d 1292. Note, though, that an unfavorable claim construction is not appealable. *SkyHawk Techs., LLC v. DECA Int’l Corp.*, 828 F.3d 1373 (Fed. Cir. 2016) (applying the “prudential rule” that the prevailing party in a lower tribunal cannot ordinarily seek relief in the appellate court).

⁶⁰*Cutsforth, Inc. v. MotivePower, Inc.*, No. 15-1314, 2016 U.S. App. LEXIS 6262 (Fed. Cir. Apr. 6, 2016) (unpublished).

⁶¹*Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355 (Fed. Cir. 2016); *Black & Decker, Inc. v. Positec USA, Inc.*, Nos. 15-1646, 15-1647, 2016 U.S. App. LEXIS 9039, at *17-18 (Fed. Cir. May 18, 2016) (unpublished); *Pride Mobility Prods. Corp. v. Permobil, Inc.*, 818 F.3d 1307 (Fed. Cir. 2016).

⁶²See *In re Warsaw Orthopedic, Inc.*, 832 F.3d 1327 (Fed. Cir. 2016); *Shaw Indus. Group v. Automated Creel Sys.*, 817 F.3d 1293 (Fed. Cir. 2016); *Nike*, 812 F.3d 1326; *Cutsforth, Inc. v. Motivepower, Inc.*, No. 15-1316, 2016 U.S. App. LEXIS 1083 (Fed. Cir. Jan. 22, 2016) (unpublished); *Ariosa Diagnostics v. Verinata Health, Inc.*, 805 F.3d 1359 (Fed. Cir. 2015).

⁶³*In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364 (Fed. Cir. 2016).

⁶⁴*IPcom GmbH & Co. v. HTC Corp.*, 861 F.3d 1362 (Fed. Cir. 2017) (“We vacate the Board’s claim construction of the ‘arrangement for reactivating the link’ limitation, and we remand for the Board to identify the corresponding algorithm (if any) in the specification in the first instance. . .”).

⁶⁵*D’Agostino v. Mastercard Int’l*, 844 F.3d 945 (Fed. Cir. 2016) (finding PTAB’s claim interpretation was “contrary to the claim as reasonably construed”).

⁶⁶*Homeland Housewares, LLC v. Whirlpool Corp.*, 865 F.3d 1372 (Fed. Cir. 2017).

continued on page 61

971 F.2d 896, 905 (2d Cir. 1992).

³⁷*Bennis*, 516 U.S. at 453.

³⁸*Austin*, 509 U.S. at 608, n.4 (“As a general matter, this Court’s decisions applying constitutional protections to civil forfeiture proceedings have adhered to th[e] distinction between provisions that are limited to criminal proceedings and provisions that are not.”).

³⁹*Id.*

⁴⁰*Id.* at 454.

⁴¹*Id.* at 453-54 (emphasis in original).

⁴²*Id.* at 454.

⁴³See 18 U.S.C. § 983.

⁴⁴Barclay Thomas Johnson, *Restoring Civility—The Civil Asset Forfeiture Reform Act of 2000: Baby Steps Toward a More Civilized Civil Forfeiture System*, 35 IND. L. REV. 1045, 1058, 1072 (2002) [hereinafter *Restoring Civility*].

⁴⁵*Id.* at 1071-72, 1075; 18 U.S.C. § 983(c)(1). CAFRA requires the government to “establish that there was a substantial connection between the property” and the asserted offense. 18 U.S.C. § 983(c)

(3). In a civil forfeiture action, an *in rem* proceeding against defendant property, the government as plaintiff seeking forfeiture asserts that, “[a]ll right, title, and interest in [the defendant] property” vests in “the United States upon commission of the act giving rise to forfeiture.” 18 U.S.C. § 981(f). It is not until the government first meets the preponderance of the evidence standard that an individual whose property is at issue has to establish the “innocent owner defense” by a preponderance of the evidence (i.e., an “innocent owner” is one who “(i) did not know of the conduct giving rise to forfeiture; or (ii) upon learning of the conduct giving rise to the forfeiture, did all that reasonably could be expected under the circumstances to terminate such use of the property.”). 18 U.S.C. §§ 983(d)(1), (d)(2)(A).

⁴⁶*Restoring Civility supra* at 1076. As examples, Johnson cites to decisions from the Nevada, Florida, Nevada, and Louisiana Supreme Courts requiring the governments, in civil forfeiture proceedings, to establish the right to forfeiture beyond a reasonable doubt. *Id.* at 1076, n.163, and 1078 n.173.

PTO Inter Partes *continued from page 55*

⁶⁷*PersonalWeb Techs., LLC v. Apple, Inc.*, 848 F.3d 987 (Fed. Cir. 2017).

⁶⁸*Id.* at 993 (“For example, claim 24 requires ‘causing the content-dependent name of the particular data item to be compared to a plurality of values.’ . . . The Board found this element satisfied. . . . That discussion, however, mentions only Stefik, not Woodhill, and yet Apple has made clear that it relies solely on Woodhill as disclosing this claim element. The Board-cited page of Apple’s petition does not explain Woodhill’s disclosure of this element. The Board’s discussion does not cite, let alone explain or analyze or adopt, an earlier portion of Apple’s petition that refers to part of column 17 of Woodhill.”).

⁶⁹*Id.* at 993-94 (“The Board’s reasoning is also deficient in its finding that a relevant skilled artisan would have had a motivation to combine Woodhill and Stefik in the way claimed in the ‘310 patent claims at issue and would have had a reasonable expectation of success in doing so. The Board’s most substantial discussion of this issue merely agrees with Apple’s contention that ‘a person of ordinary skill in the art reading Woodhill and Stefik would have understood that the combination of Woodhill and Stefik *would have allowed for* the selective access features of Stefik to be used with Woodhill’s content-dependent identifiers feature.’ (emphasis added). But that reasoning seems to say no more than that a skilled artisan, once presented with the two references, would have understood that they could be combined. And that is not enough: it does not imply a motivation to pick out those two references and combine them to arrive at the claimed invention.”).

⁷⁰*Id.* (quoting *Chenery*, 318 U.S. at 94).

⁷¹*Shinn Fu Tire Hanger*, No. 16-2250, 2017 U.S. App. LEXIS 11787 (Fed. Cir. 2017).

⁷²*Husky Injection Molding Sys. v. Athena Automation Ltd.*, 838 F.3d 1236 (Fed. Cir. 2016).

⁷³*Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 851 F.3d 1270 (Fed. Cir. 2017).

⁷⁴*Smartdoor Holdings, Inc. v. Edmit Indus., Inc.*, No. 16-2152, 2017 U.S. App. LEXIS 17264 (Fed. Cir. Sept. 7, 2017) (unpublished).

⁷⁵*Knowles Elecs. LLC v. Matal*, No. 16-1954, Dkt. No. 61 (Fed. Cir.).

⁷⁶Brief for Petitioner, *Oil States Energy Serv., LLC v. Greene’s Energy Group LLC*, ___ U.S. ___ (2017) (No. 16-712), <http://www.scotusblog.com/wp-content/uploads/2017/08/16-712-ts.pdf>.

⁷⁷*Oil States Energy Serv., LLC v. Greene’s Energy Group LLC*, SCOTUS BLOG, <http://www.scotusblog.com/case-files/cases/oil-states-energy-services-llc-v-greenes-energy-group-llc> (last visited Dec. 26, 2017).

⁷⁸*SAS Inst., Inc. v. Lee*, 137 S. Ct. 2160 (2017).

⁷⁹Brief for Petitioner, *SAS Inst. Inc. v. Matal*, ___ U.S. ___ (2017) (No. 16-969), <http://www.scotusblog.com/wp-content/uploads/2017/08/16-969-ts.pdf>.

⁸⁰Brief of Amicus Curiae, *Intellectual Property Owners Association in Support of Petitioner, SAS Inst. Inc. v. Matal*, ___ U.S. ___ (2017) (No. 16-969), <http://www.scotusblog.com/wp-content/uploads/2017/08/16-969-cert-tsac-IPOA.pdf>.

⁸¹Brief for Respondent *Complementsoft LLC, SAS Inst. Inc. v. Matal*, ___ U.S. ___ (2017) (No. 16-969), <http://www.scotusblog.com/wp-content/uploads/2017/09/16-969-bs-complementsoft.pdf>.